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10/715,425	11/19/2003	Jerome Cornet	ALC 3097	5332

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *24 January 2008*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-8* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-8* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *24 January 2008* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings were received on January 24, 2008. These drawings are acceptable.

Response to Arguments

Applicant's arguments with respect to the rejection of claims 3, 4, 7, and 8 under 35 USC

101 have been considered and are persuasive. Accordingly, the rejection has been withdrawn.

Applicant's arguments with respect to the rejection of claims 1-8 under 35 USC 103(a)

have been fully considered but are not persuasive.

Applicant argues that neither Abjanic nor Horvitz teach "the routing instruction processor

connected to a top side of the parser; and an HTTP analysis layer connected to a bottom side of

the parser, the bottom side being opposite the top side." It is not clear how software can have a

"top side" or a "bottom side," as such terms are customarily associated with physical objects that

can be oriented in space. In attempting to reasonably interpret these terms, examiner has turned

to the specification for guidance. The structure of the content switch is briefly described in

paragraphs [0022]-[0024] and depicted in Fig. 3. From this limited description, it appears that

Fig. 3 is merely a logical diagram of software running on the switch. Thus, the examiner will

interpret the language of the limitations as being intended to a software architecture similar to

that depicted in Fig. 3.

In the computer networking arts, a "layer" diagram (such as that of Fig. 3) is used merely

to depict an architecture where messages to be processed pass through multiple software

components, each of which provides a specific service or function. The combination of Abjanic

and Horvitz, as described below, teaches a system that processes messages by applying specific

functions to them as they pass through different software components, in the same order as

implied by the arrangement of layers in Fig. 3 (first HTTP analysis, then XML and rule

document parsing, then routing instruction processing). Thus, applicant's arguments cannot be

held as persuasive regarding patentability, and the rejection is maintained.

Specification

The specification is objected to as failing to provide proper antecedent basis for the

claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the

following is required: the specification contains no discussion of a parser having a "top side" and

a "bottom side."

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making
and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
contemplated by the inventor of carrying out his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed

invention. Specifically, the specification contains no discussion of a parser having a "top side"

and a "bottom side."

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Specifically, it is not clear how software can have a "top side" or a "bottom side," as such

terms are customarily associated with physical objects that can be oriented in space. See

"Response to Arguments," above, for a discussion of how these terms will be interpreted.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abjanic et al.

(US PGPUB 2003/0028654, hereinafter "Abjanic") in view of Horvitz (US PGPUB

2003/0097495).

Regarding claim 1, Abjanic shows a content switch comprising:

- a parser (content based switching decision logic 316: see [0059]) for parsing a document (comprising a group of configuration patterns: see [0059]-[0061]) associated with a packet (comprising a packet of XML data: see [0055]-[0056]) and containing routing rules (comprising configuration patterns: see [0052] and [0061]); and

- a routing instruction processor to interpret the routing rules (content based switching logic 316: see [0059]),

- the routing instruction processor connected to a top side of the parser (necessarily the case, as the rules must be interpreted after they are parsed); and an HTTP analysis layer (block 310: see [0057] and [0041]) connected to a bottom side of the parser (necessarily the case, as block 310 operates on the data before the switching decision logic: see Fig. 3), the bottom side being opposite the top side (necessarily the case, as block 310 occurs before switching logic 216).

Abjanic does not show parsing a schema document associated with a packet and containing routing rules.

Horvitz shows parsing a schema document associated with a packet and containing routing rules (see [0159]-[0161]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Abjanic with the schema document of Horvitz in order to provide routing "hints" to a downstream network element (see Horvitz, [0161]).

Regarding claim 2, Abjanic in view of Horvitz shows the limitations of claim 1 as applied

above, and Abjanic further shows wherein the content switch is for parsing XML-based language

(see [0028]).

Regarding claim 3, Abjanic shows a method comprising:

- determining a routing action to be taken on packets of a flow associated with a

  document wherein the determination is made by applying routing rules to

  elements parsed from the document (see [0059]), and

- routing the packets according to the determined routing action (see [0060]),

- wherein determining the routing action is performed by a routing instruction

  processor (content based switching logic 316: see [0059]), the elements are parsed

  from the document by a parser (parser 312), and the parser is connected between

  the routing instruction processor and an HTTP analysis layer (block 310: see Fig.

  3 and [0057]).

Abjanic does not show wherein the document is written according to a schema containing

routing rules.

Horvitz shows a document written according to a schema containing routing rules (see

[0159]-[0161]).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify the system of Abjanic with the schema document of Horvitz in order to provide

routing "hints" to a downstream network element (see Horvitz, [0159]).

Regarding claim 4, Abjanic in view of Horvitz shows the limitations of claim 3 as applied above, and Abjanic further shows wherein an XML-based language is used (see [0028]).

Regarding claim 5, Abjanic shows:

- a content switch (director 145) having a routing instruction processor (content based switching decision logic 316: see [0059]) capable of interpreting routing rules in a document (comprising a group of configuration patterns: see [0059]-[0061]) and applying the rules to elements in the network (see [0060]), the rules being parsed from the document by a parser (see [0059]), and means to determine a routing action to be performed on packets from a packet flow associated with the document (content based switching decision logic 316: see [0059]).

Abjanic does not show routing rules in a document written according to a schema.

Horvitz shows routing rules in a document written according to a schema parsed from the document by a parser (see [0159]-[0161]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Abjanic with the schema document and parsing of Horvitz in order to provide routing "hints" to a downstream network element (see Horvitz, [0159]).

Regarding claim 6, Abjanic in view of Horvitz shows the limitations of claim 3 as applied above, and Abjanic further shows wherein the system is for parsing XML-based languages (see [0028]).

Regarding claim 7, Abjanic shows a computer program stored on a computer-readable medium for use in a computer based communication system having a routing instruction processor (content based switching logic 316: see [0059]), a parser (parser 312), and an HTTP analysis layer (block 310), the parser connected between the routing instruction processor and the HTTP analysis layer (see Fig. 3), the document including routing rules (see [0059]), which, when accessed to parse a document, provide routing actions to be taken on packets belonging to a traffic flow associated with the document (see [0066]), and routing the packets accordingly (see [0060]).

Abjanic does not show a schema including routing rules which provide routing actions.

Horvitz shows a schema including routing rules which provide routing actions.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Abjanic with the schema document of Horvitz in order to provide routing "hints" to a downstream network element (see Horvitz, [0159]).

Regarding claim 8, Abjanic in view of Horvitz shows the limitations of claim 7 as applied above, and Abjanic further shows wherein the routing rules are defined by an application provider (see [0047] and [0054]).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Christopher Biagini whose telephone number is (571)272-9743.

The examiner can normally be reached on weekdays from 8:30 AM to 5:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Biagini
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/Andrew Caldwell/
Supervisory Patent Examiner, Art Unit 2142